File Names

File #	Original File Name
1	EPA_SS_FRESNO_AE-SPEC-5MIN_19990512_19990930_V1.csv

Data Exchange Standard Version	Principal Investigator Name--last first	Principal Investigator Affiliation	File Contents Description--short long	Samplng Interval As Reported in Main Table
NARSTO 2002/05/28 (2.301)	Watson ; Dr. John	Desert Research Institute, 2215 Raggio Pkwy, Reno, NV 89506, USA	AETH7_5_MIN ; Aerosol Black Carbon 5-min concentrations at 7 wavelengths of light	5 minute

Samplng Frequency Of Data in Main Table	Quality Control Level	Organization Acronym	Organization Name	Data Usage Acknowledgement	Study Or Network Acronym
Same as sampling interval	1	EPA_PM_SS	EPA Particulate Matter Supersites Program	Desert Research Institute, 2215 Raggio Pkwy, Reno, NV 89506, USA	EPA_SS_FRESNO

Study Or Network Name	Country Code	State Or Province Code	Principal Investigator Contact Information	Co-investigator Name--last first	Co-investigator Affiliation
EPA_Supersites--Fresno	US	CA	Dr. John G. Watson, Desert Research Institute, 2215 Raggio Pkwy, Reno, NV 89506, USA	None ; None	None

Name And Affiliation Of Person Who Generated This File	Date Of Last Modification To Data In Main Table	Name And Version Of Software Used To Create This File
Norm Robinson, DRI	2002/11/15	MS VB.Net; MS SQL Server 2000

Companion File Name format And Version	Date This File Generated archive Version Number	Table Explanation Of Zero Or Negative Values	Table Explanation Of Reported Detection Limit Values
None ; None	2003/02/13 ; 1	Zero and negative values occur during clean atmospheric conditions when concentrations are below detection limits.	Detection limits are currently being evaluated.

Table Explanation Of Reported Uncertainty	Table User Note	Table User Note2	Table User Note3	Table User Note4	Table Name
See *TABLE USER NOTE2	Aerosol Black Carbon 5 min concentrations	Uncertainty is not reported in this file. However, uncertainties for longer time averages may be estimated as the standard error of the average of the 5-minute data. The final Project Report willdiscuss uncertainty in more depth.			AETH7_5_MIN

Table Focus
Surface--fixed

Site Information

Site ID	Name	State Province code	Latitude: decimal degree	Longitude: decimal degree	Sampling height above ground (m)	Ground elevation above sea level (m)
ES2FUSCAFSF_	3425 N First St Fresno	CA	36.78170	-119.77330	12.2	29.6

Site ID	Site land use	Site location setting	Measurement start date	Measurement end date	Co-incident measurements	Study site ID	Lat lon accuracy
ES2FUSCAFSF_	Commercial	Urban and center city	1999/05/01	9999/12/31	N	N	-999.9

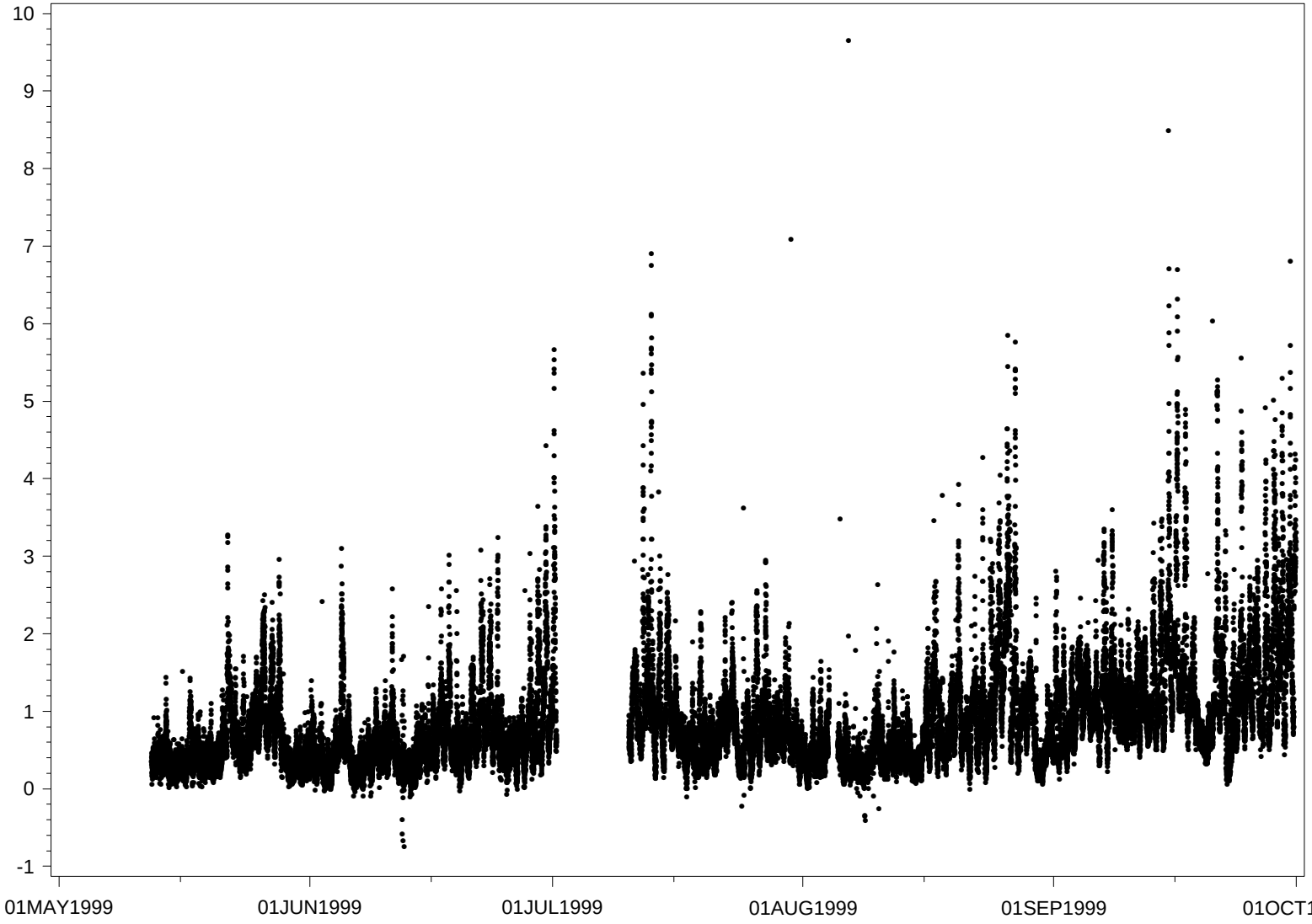
NARSTO Standard Flags

Flag: NARSTO	Description
H1	Historical data that have not been assessed or validated
M1	Missing value because no value is available
M2	Missing value because invalidated by data originator
V0	Valid value
V1	Valid value but comprised wholly or partially of below detection limit data
V2	Valid estimated value
V3	Valid interpolated value
V4	Valid value despite failing to meet some QC or statistical criteria
V5	Valid value but qualified because of possible contamination (e.g., pollution source, laboratory contamination source)
V6	Valid value but qualified due to non-standard sampling conditions (e.g., instrument malfunction, sample handling)
V7	Valid value but set equal to the detection limit (DL) because the measured value was below the DL

NARSTO Time Series Plot 02NOV2007

Site ID: **ES2FUSCAFSF_** Variable name: **Carbon: elemental (EC)** Units: **ug/m3** Sampling interval: **5 minute**
Sampling frequency: **Same as sampling interval** Observation type: **Particles** Particle diameter--lower bound (UM): **Undetermined**
Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Optical attenuation--aethalometer** Medium: **Quartz**
Inlet type: **Cyclone** Volume standardization: **20 deg. C; 1 atmosphere** Sampling Height above ground (m): **10.7** Wavelength (NM): **370**
Instrument name and model number: **Anderson Instruments, Model AE-31** Detection Limit: **Undetermined**

Site Name:**3425 N First St Fresno, California** Latitude:**36.7817 deg.** Longitude:**-119.7733 deg.** Start Date:**1999-05-01**



Statistics
Number of obs: **40,896**
Number of missing: **4,123**
Minimum: **-0.751**
25th Percentile: **0.404**
Median: **0.675**
Mean: **0.843**
75th Percentile: **1.07**
Maximum: **9.653**
Stnd Dev.: **0.664**

NARSTO Flags

Flag Symbol Count

M1: **4,123**
V0: ● **36,773**

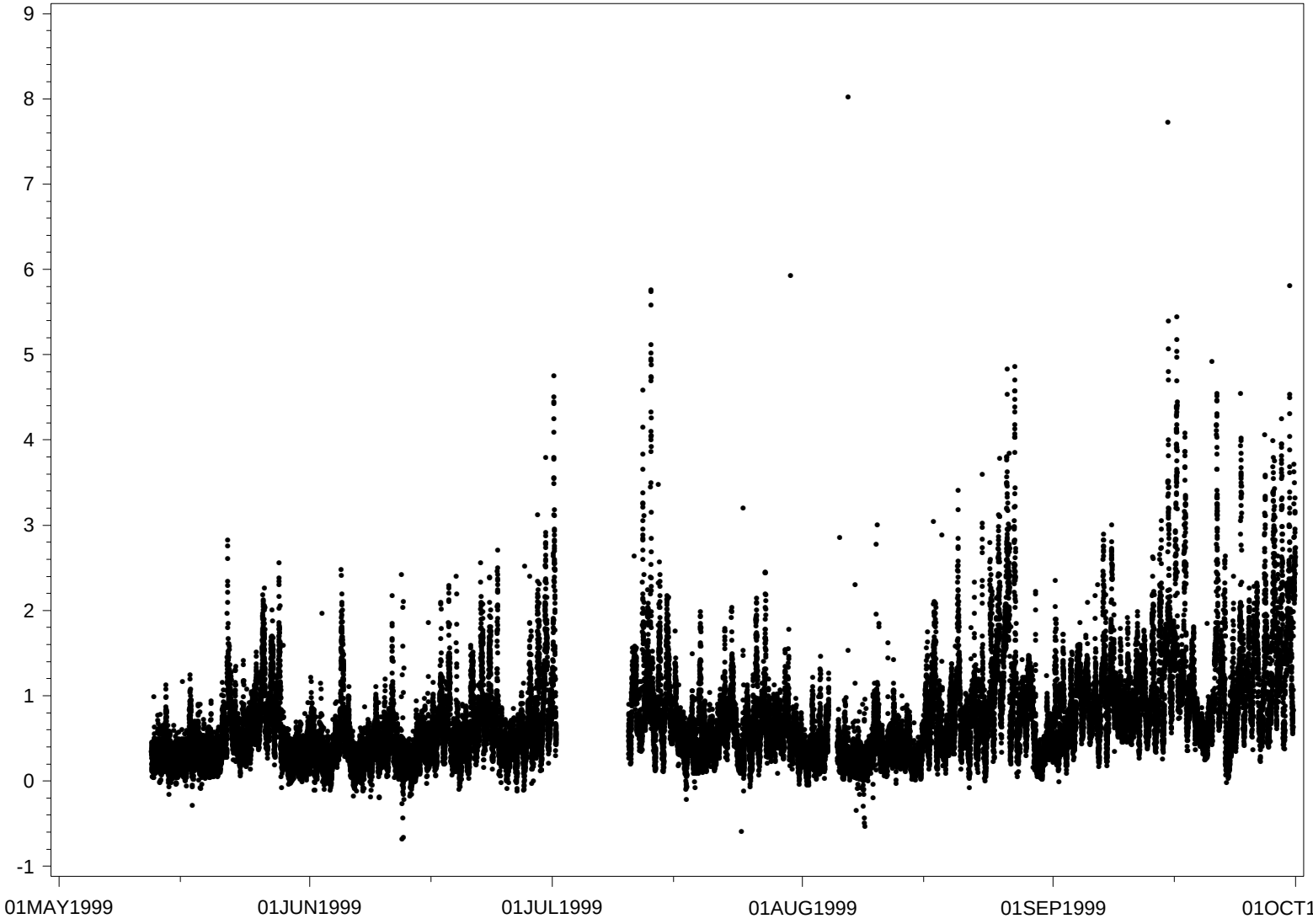
Time Zone: PST

File Name: NARSTO_EPA_SS_FRESNO_AE-SPEC-5MIN_19990512_19990930_V1

NARSTO Time Series Plot 02NOV2007

Site ID: **ES2FUSCAFSF_** Variable name: **Carbon: elemental (EC)** Units: **ug/m3** Sampling interval: **5 minute**
Sampling frequency: **Same as sampling interval** Observation type: **Particles** Particle diameter--lower bound (UM): **Undetermined**
Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Optical attenuation--aethalometer** Medium: **Quartz**
Inlet type: **Cyclone** Volume standardization: **20 deg. C; 1 atmosphere** Sampling Height above ground (m): **10.7** Wavelength (NM): **470**
Instrument name and model number: **Anderson Instruments, Model AE-31** Detection Limit: **Undetermined**

Site Name:**3425 N First St Fresno, California** Latitude:**36.7817 deg.** Longitude:**-119.7733 deg.** Start Date:**1999-05-01**



Statistics
Number of obs: **40,896**
Number of missing: **4,123**
Minimum: **-0.684**
25th Percentile: **0.334**
Median: **0.563**
Mean: **0.705**
75th Percentile: **0.899**
Maximum: **8.029**
Stnd Dev.: **0.569**

NARSTO Flags

Flag Symbol Count

M1: **4,123**
V0: ● **36,773**

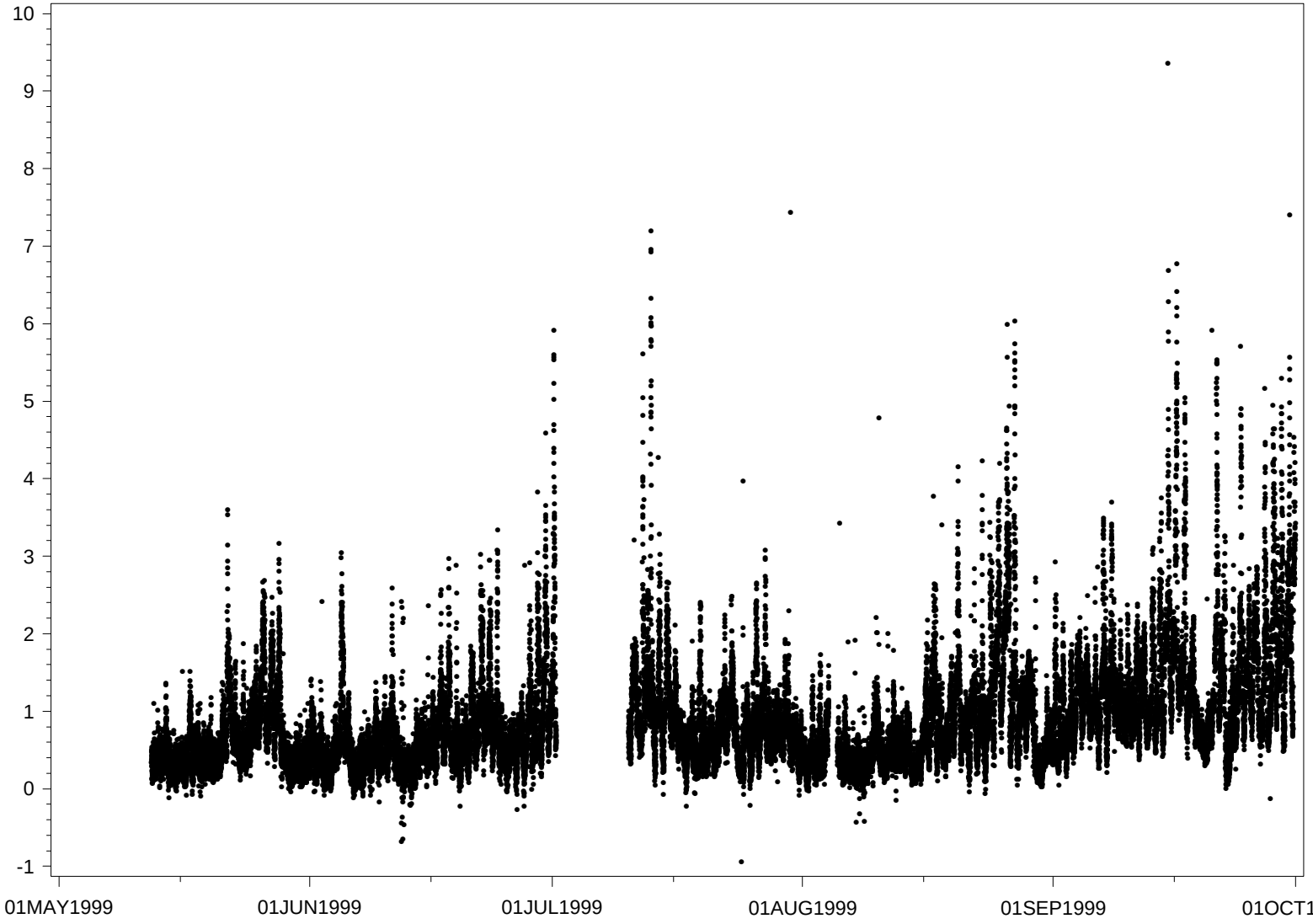
Time Zone: PST

File Name: NARSTO_EPA_SS_FRESNO_AE-SPEC-5MIN_19990512_19990930_V1

NARSTO Time Series Plot 02NOV2007

Site ID: **ES2FUSCAFSF_** Variable name: **Carbon: elemental (EC)** Units: **ug/m3** Sampling interval: **5 minute**
Sampling frequency: **Same as sampling interval** Observation type: **Particles** Particle diameter--lower bound (UM): **Undetermined**
Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Optical attenuation--aethalometer** Medium: **Quartz**
Inlet type: **Cyclone** Volume standardization: **20 deg. C; 1 atmosphere** Sampling Height above ground (m): **10.7** Wavelength (NM): **520**
Instrument name and model number: **Anderson Instruments, Model AE-31** Detection Limit: **Undetermined**

Site Name:**3425 N First St Fresno, California** Latitude:**36.7817 deg.** Longitude:**-119.7733 deg.** Start Date:**1999-05-01**



Statistics
Number of obs: **40,896**
Number of missing: **4,123**
Minimum: **-0.936**
25th Percentile: **0.417**
Median: **0.698**
Mean: **0.872**
75th Percentile: **1.108**
Maximum: **9.359**
Stnd Dev.: **0.693**

NARSTO Flags

Flag Symbol Count

M1: **4,123**
V0: **36,773**

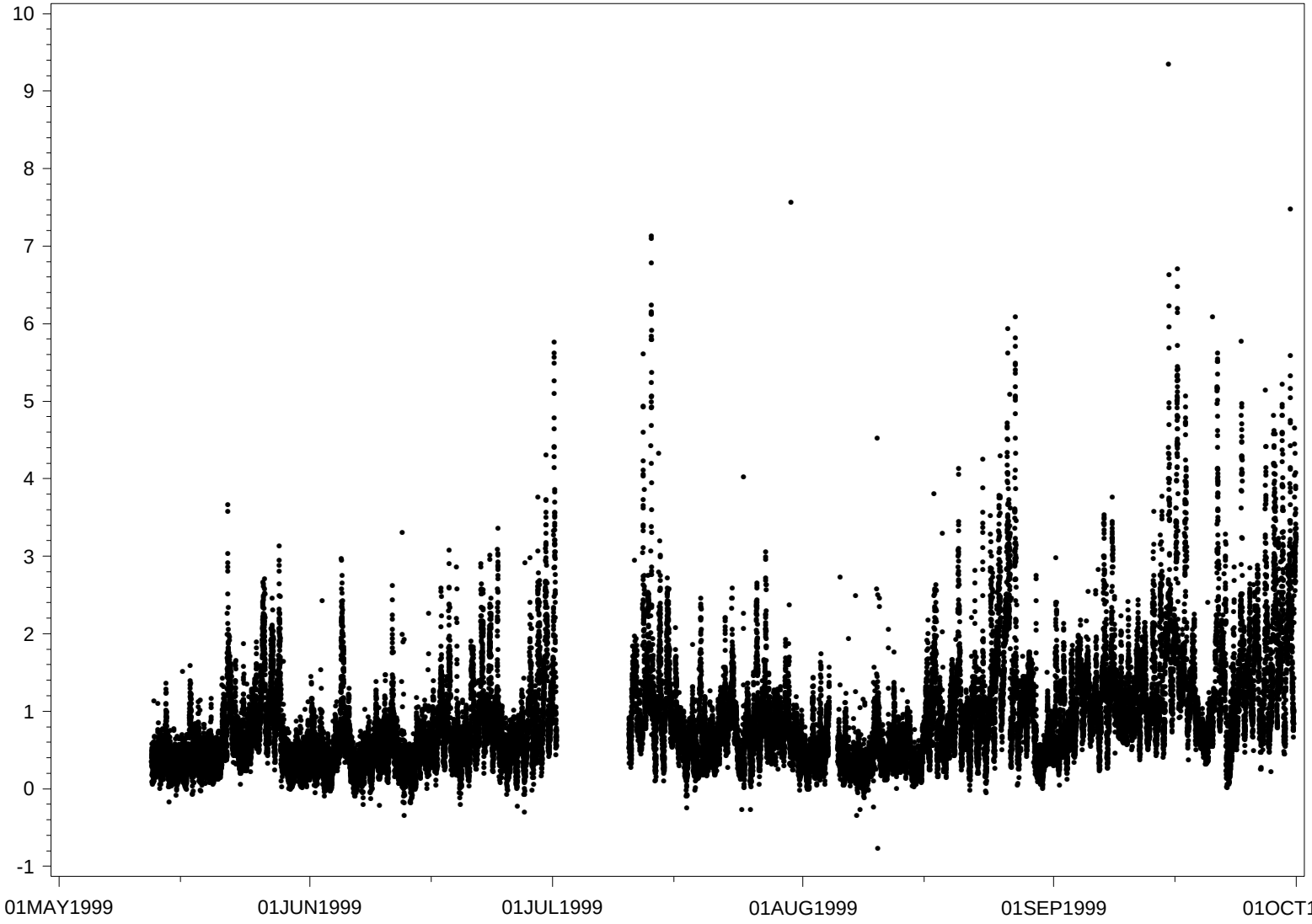
Time Zone: PST

File Name: NARSTO_EPA_SS_FRESNO_AE-SPEC-5MIN_19990512_19990930_V1

NARSTO Time Series Plot **02NOV2007**

Site ID: **ES2FUSCAFSF_** Variable name: **Carbon: elemental (EC)** Units: **ug/m3** Sampling interval: **5 minute**
Sampling frequency: **Same as sampling interval** Observation type: **Particles** Particle diameter--lower bound (UM): **Undetermined**
Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Optical attenuation--aethalometer** Medium: **Quartz**
Inlet type: **Cyclone** Volume standardization: **20 deg. C; 1 atmosphere** Sampling Height above ground (m): **10.7** Wavelength (NM): **590**
Instrument name and model number: **Anderson Instruments, Model AE-31** Detection Limit: **Undetermined**

Site Name:**3425 N First St Fresno, California** Latitude:**36.7817 deg.** Longitude:**-119.7733 deg.** Start Date:**1999-05-01**



Statistics
Number of obs: **40,896**
Number of missing: **4,123**
Minimum: **-0.766**
25th Percentile: **0.418**
Median: **0.699**
Mean: **0.874**
75th Percentile: **1.109**
Maximum: **9.343**
Stnd Dev.: **0.698**

NARSTO Flags

Flag Symbol Count

M1: **4,123**
V0: ● **36,773**

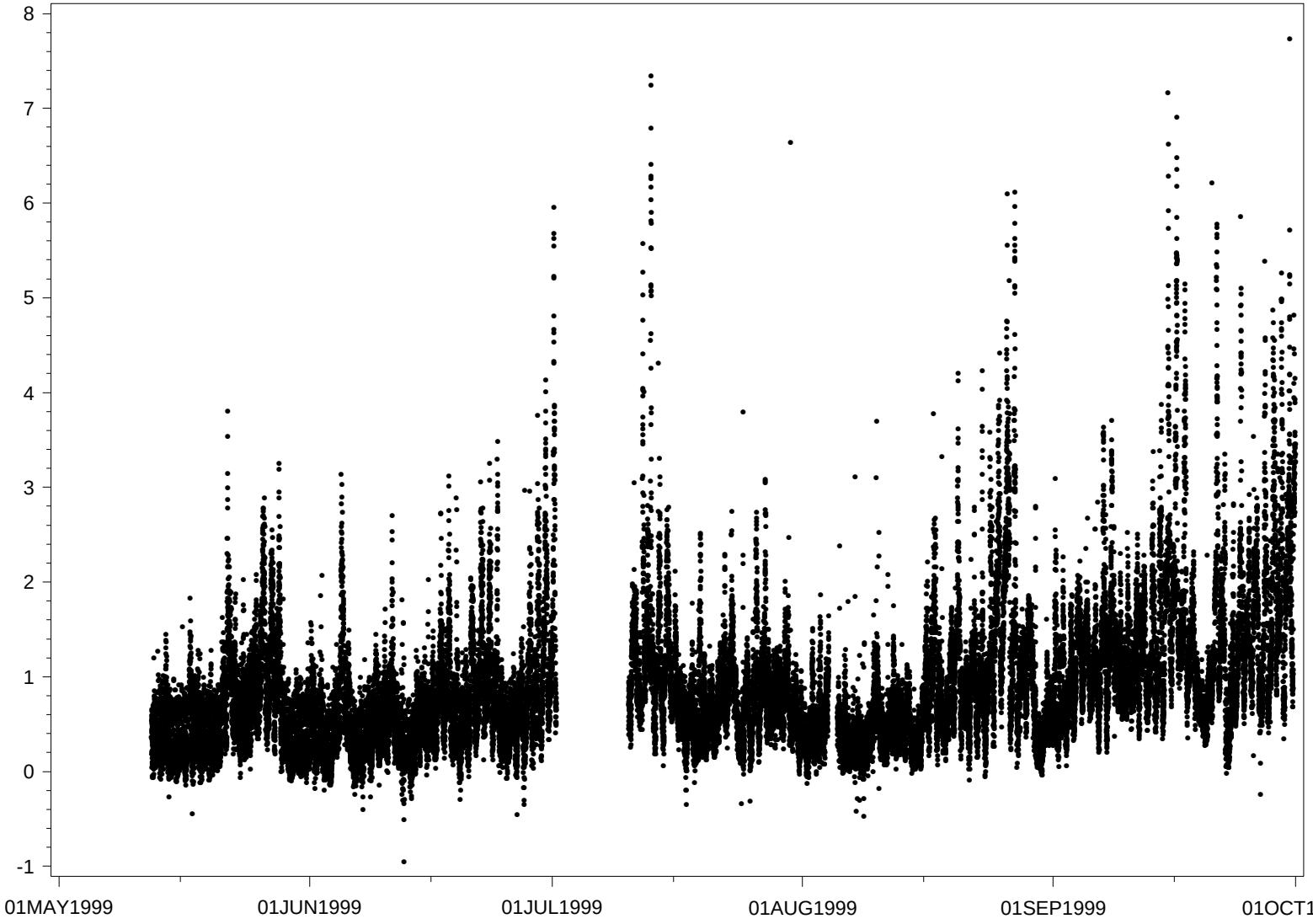
Time Zone: PST

File Name: NARSTO_EPA_SS_FRESNO_AE-SPEC-5MIN_19990512_19990930_V1

NARSTO Time Series Plot 02NOV2007

Site ID: **ES2FUSCAFSF_** Variable name: **Carbon: elemental (EC)** Units: **ug/m3** Sampling interval: **5 minute**
Sampling frequency: **Same as sampling interval** Observation type: **Particles** Particle diameter--lower bound (UM): **Undetermined**
Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Optical attenuation--aethalometer** Medium: **Quartz**
Inlet type: **Cyclone** Volume standardization: **20 deg. C; 1 atmosphere** Sampling Height above ground (m): **10.7** Wavelength (NM): **660**
Instrument name and model number: **Anderson Instruments, Model AE-31** Detection Limit: **Undetermined**

Site Name:**3425 N First St Fresno, California** Latitude:**36.7817 deg.** Longitude:**-119.7733 deg.** Start Date:**1999-05-01**



Statistics
Number of obs: **40,896**
Number of missing: **4,123**
Minimum: **-0.955**
25th Percentile: **0.418**
Median: **0.723**
Mean: **0.888**
75th Percentile: **1.144**
Maximum: **7.731**
Stnd Dev.: **0.720**

NARSTO Flags

Flag Symbol Count

M1: **4,123**
V0: **36,773**

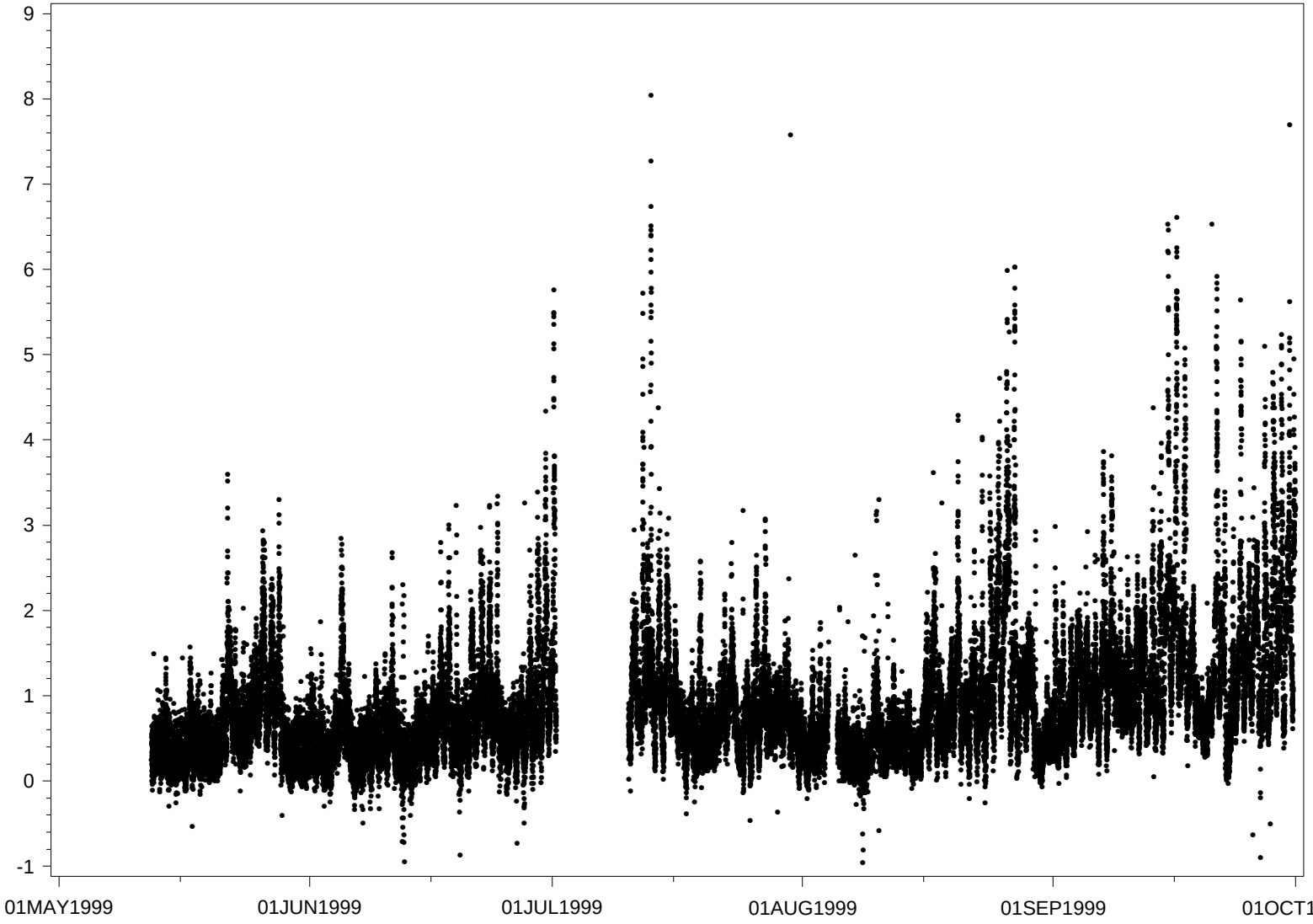
Time Zone: PST

File Name: NARSTO_EPA_SS_FRESNO_AE-SPEC-5MIN_19990512_19990930_V1

NARSTO Time Series Plot 02NOV2007

Site ID: **ES2FUSCAFSF_** Variable name: **Carbon: elemental (EC)** Units: **ug/m3** Sampling interval: **5 minute**
Sampling frequency: **Same as sampling interval** Observation type: **Particles** Particle diameter--lower bound (UM): **Undetermined**
Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Optical attenuation--aethalometer** Medium: **Quartz**
Inlet type: **Cyclone** Volume standardization: **20 deg. C; 1 atmosphere** Sampling Height above ground (m): **10.7** Wavelength (NM): **880**
Instrument name and model number: **Anderson Instruments, Model AE-31** Detection Limit: **Undetermined**

Site Name:**3425 N First St Fresno, California** Latitude:**36.7817 deg.** Longitude:**-119.7733 deg.** Start Date:**1999-05-01**



Statistics
Number of obs: **40,896**
Number of missing: **4,123**
Minimum: **-0.959**
25th Percentile: **0.408**
Median: **0.703**
Mean: **0.880**
75th Percentile: **1.13**
Maximum: **8.046**
Stnd Dev.: **0.727**

NARSTO Flags

Flag Symbol Count

M1: **4,123**
V0: ● **36,773**

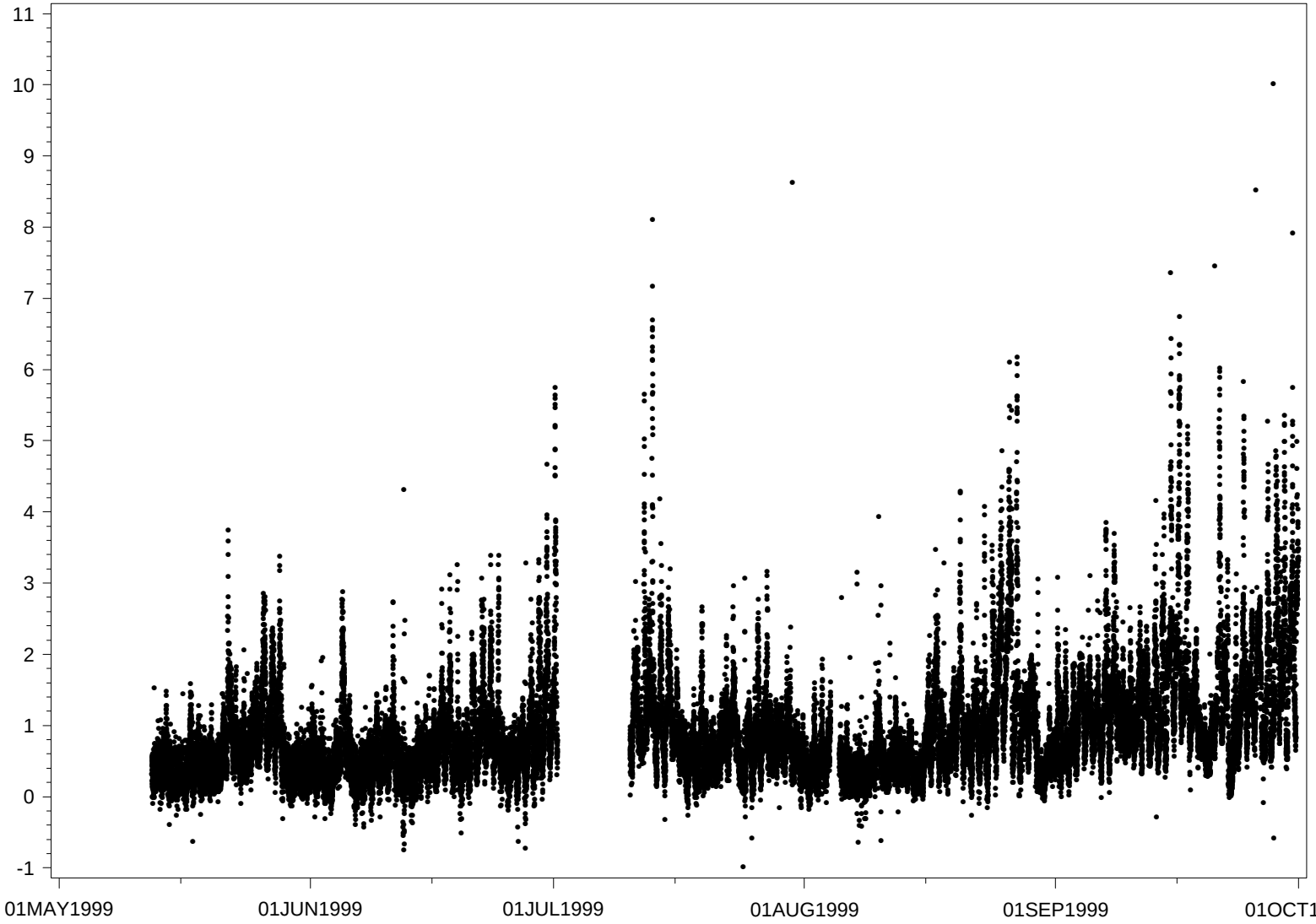
Time Zone: PST

File Name: NARSTO_EPA_SS_FRESNO_AE-SPEC-5MIN_19990512_19990930_V1

NARSTO Time Series Plot **02NOV2007**

Site ID: **ES2FUSCAFSF_** Variable name: **Carbon: elemental (EC)** Units: **ug/m3** Sampling interval: **5 minute**
Sampling frequency: **Same as sampling interval** Observation type: **Particles** Particle diameter--lower bound (UM): **Undetermined**
Particle diameter--upper bound (UM): **2.5** Field sampling or measurement principle: **Optical attenuation--aethalometer** Medium: **Quartz**
Inlet type: **Cyclone** Volume standardization: **20 deg. C; 1 atmosphere** Sampling Height above ground (m): **10.7** Wavelength (NM): **950**
Instrument name and model number: **Anderson Instruments, Model AE-31** Detection Limit: **Undetermined**

Site Name:**3425 N First St Fresno, California** Latitude:**36.7817 deg.** Longitude:**-119.7733 deg.** Start Date:**1999-05-01**



Statistics
Number of obs: **40,896**
Number of missing: **4,123**
Minimum: **-0.977**
25th Percentile: **0.416**
Median: **0.716**
Mean: **0.895**
75th Percentile: **1.148**
Maximum: **10.022**
Stnd Dev.: **0.742**

NARSTO Flags

Flag Symbol Count

M1: **4,123**
V0: ● **36,773**

Time Zone: PST

File Name: NARSTO_EPA_SS_FRESNO_AE-SPEC-5MIN_19990512_19990930_V1